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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,143	09/04/2003	Beverly A. Rzigalinski	UCF-375 6531	
	7590 09/18/200 S OF BRIAN S STEIN	EXAMINER		
101 BREVARD	AVENUE	CARTER, KENDRA D		
COCOA, FL 32	:922		ART UNIT	PAPER NUMBER
			1617	
			MAIL DATE	DELIVERY MODE
			09/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Applicat	ion No.	Applicant(s)		
Office Action Summary		143	RZIGALINSKI ET AL.		
		er	Art Unit		
	KENDRA	A D. CARTER	1617		
The MAILING DATE of this comn Period for Reply	unication appears on th	ne cover sheet with the	correspondence ad	dress	
A SHORTENED STATUTORY PERIOR WHICHEVER IS LONGER, FROM THE - Extensions of time may be available under the provise after SIX (6) MONTHS from the mailing date of this of the second of	E MAILING DATE OF T ons of 37 CFR 1.136(a). In no e ommunication. In statutory period will apply and eply will, by statute, cause the ap ths after the mailing date of this of	THIS COMMUNICATIO event, however, may a reply be ti will expire SIX (6) MONTHS from oplication to become ABANDONE	N. mely filed in the mailing date of this co ED (35 U.S.C. § 133).		
Status					
 Responsive to communication(s) This action is FINAL. Since this application is in condit closed in accordance with the present the condition of the communication of	2b)⊡ This action is on for allowance excep	ot for formal matters, pr		e merits is	
Disposition of Claims					
4) ☐ Claim(s) <u>27,29,32 and 33</u> is/are p 4a) Of the above claim(s) is 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>27,29,32 and 33</u> is/are p 7) ☐ Claim(s) is/are objected to 8) ☐ Claim(s) are subject to res	s/are withdrawn from o ejected.	onsideration.			
Application Papers					
9) The specification is objected to by 10) The drawing(s) filed on is/a Applicant may not request that any or Replacement drawing sheet(s) included the control of th	re: a) accepted or be bjection to the drawing(s) ling the correction is requ	be held in abeyance. Se ired if the drawing(s) is ob	e 37 CFR 1.85(a). Djected to. See 37 CF	, ,	
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Revie 3) Information Disclosure Statement(s) (PTO/SB/I		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:)ate		

DETAILED ACTION

The Examiner acknowledges the applicant's remarks and arguments of April 23, 2008 made to the office action filed April 16, 2008. Claims 27, 29, 32 and 33 are pending. Claims 27, 29, 32 and 33 are amended.

In light of the amendments, the claim objection of claim 29 and the specification objection is withdrawn.

The Applicant's amendments have not overcome the 35 USC 112, first paragraph and thus is upheld.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 27, 29, 32 and 33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Particularly, there is no written description of taking the <u>culture of treated *in vitro* brain cells</u> and implanting or administering them *in vivo* to any area of the body. Further, there is no written description of applying <u>a culture of treated brain cells</u> to a stent to treat <u>vascular</u> <u>damage</u> associated with vascular disease and inflammatory response. Claim 27 reads on adding an application of the cerium oxide nanoparticles to an *in vitro* culture of brain cells, then enhancing the lifespan of the brain cells <u>in the body</u>. Claims 32 and 33 further limit the mode of delivery by either stent, oral, intravenous, or intrathecal *in vivo*.

The Examiner suggests that the claim language "in the body" in claim 27 (line 2) be removed in order to keep the claim consistent with *in vitro* methods. Therefore, claim 32 can be written in independent form for the *in vivo* method, wherein claim 33 would be dependent on claim 32.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENDRA D. CARTER whose telephone number is (571)272-9034. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. D. C./ Examiner, Art Unit 1617

/SREENI PADMANABHAN/ Supervisory Patent Examiner, Art Unit 1617